

# PROGRAMME

## Day 1, Workshops (June 5, Wednesday)

09:30-10:00 Registration

Philipp Orekhov, Marine Bozdaganyan Drug design (32/203, 2<sup>nd</sup> floor)

10:00-13:00  
(1<sup>st</sup> stream)

Milita Kocharovskaya Cryo-EM (34/428, 4<sup>th</sup> floor)

Maxim Dubinnyi, Erik Kot, Vladislav Lushpa NMR (library, BON, 1<sup>st</sup> floor)

13:00-14:00 Lunch Time

Philipp Orekhov, Marine Bozdaganyan Drug design (32/203, 2<sup>nd</sup> floor)

14:00-17:00  
(2<sup>nd</sup> stream)

Milita Kocharovskaya Cryo-EM (34/428, 4<sup>th</sup> floor)

Maxim Dubinnyi, Erik Kot, Vladislav Lushpa NMR (library, BON, 1<sup>st</sup> floor)

## Day 2, Lectures and Posters (June 6, Thursday, Big conference hall, BON, 2<sup>nd</sup> floor)


09:00-09:30 Registration

09:30-12:00 Cryo-EM, chairman Prof. Zakhar Shenkarev

09:30-09:45 Alexander Gabibov, Mikhail Kirpichnikov Greetings


09:45-10:25 Alexey Amunts What can we learn from structural studies of mitochondrial complexes

10:25-10:55 Invited speaker Structural and functional insight into the novel subgroup of light-driven sodium pumps

10:55-11:20	Olga Sokolova	Unique structure of bacteriophage DT57C: what could cryo-EM show?
11:20-11:45	Victor Kostyuchenko	Cryo-Electron Microscopy Studies of Flaviviruses
11:45-12:00	 Sergey Irkhin, DIA-M	Изучение межмолекулярных взаимодействий и изучение аффинности белковых молекул с применением технологии SPR. Особенности систем S-Class компании Polariton.
12:00-12:20	Coffee-break	
12:20-14:15	X-Ray, NMR and Cryo-EM, chairman Dr. Dmitry Bagrov	
12:20-13:00	Harald Schwalbe	NMR of RNA
13:00-13:25	Andrey Konevega	Rare events: Don't be lost in translation
13:25-13:50	Konstantin Usachev	Crystal structure of the eukaryotic ribosome in complex with small molecule inhibitors
13:50-14:15	Alexandra Luginina	Structural GPCR investigations for rational drug design
14:15-15:00	Lunch Time	
15:00-16:00	Poster session	
16:00-18:20	Cryo-EM and other methods of Structural Biology, chairman Dr. Philipp Orekhov	
16:00-16:25	Ekaterina Lyukmanova	Structural insight of regulation of SARS-CoV-2 interaction with ACE-2 receptor by specific antibodies
16:25-16:50	Dmitry Bagrov	Application of atomic-force microscopy in structural biology
16:50-17:15	Anton Efimov	Probe and optical nanotomography for structural analysis of biological objects and materials

17:15-17:40	Nikolai Sluchanko	Structures and applications of carotenoid-binding proteins
17:40-18:05	Konstantin Boyko	High-resolution structure of the light-harvesting complexes from the purple sulfur bacterium <i>Ectothiorhodospira haloalkaliphila</i>
18:05-18:20	 Ekaterina Lyukmanova	About the Master program "Structural Biology and Biotechnology" of Lomonosov MSU
19:00	Round table "Structural biology in Russia: today and tomorrow"	

### Day 3, Lectures, Scientific battle and Social event (June 7, Friday)

09:00-09:30	Registration	
09:30-11:25	NMR spectroscopy, chairman Prof. Ekaterina Lyukmanova	
09:30-09:55	Konstantin Mineev	NMR spectroscopy as a tool to study the single-pass cell receptors
09:55-10:20	Zakhar Shenkarev	Gating-modifying spider toxins regulate TRPA1 channel by interaction with S1-S4 domain
10:20-10:45	Vladimir Polshakov	NMR studies of cooperative interactions
10:45-11:10	Maxim Dubinnyi	NMR analytics from scratch to new bioluminescent systems
11:10-11:25	 Evgenii Vorontsov, Creafab	ЯМР из Китая
11:25-11:40	Group photo	
11:40-12:00	Coffee-break	

12:00-13:55	NMR and EPR spectroscopy, chairman Prof. Alexey Shaytan	
12:00-12:25	Xiangyan Shi	Investigation of multi-scale dynamical properties in chromatin regulation by solid-state NMR
12:25-12:50	Nikolay Isaev	EPR capabilities in structural biology
12:50-13:05	Alexander Kolobov,  Helicon	Оценка уровня агрегации и стабильности белковых препаратов перед кристаллизацией
13:05-13:30	Roman Efremov	Computational structural biology of membrane proteins
13:30-13:55	Alexey Shaytan	Structural biology of chromatin
13:55-15:00	Lunch Time	
15:00-16:35	Computer modelling, chairman Prof. Alexey Amunts	
15:00-15:25	Anton Chugunov	Applications of the Emerging Deep Learning Techniques for Protein 3D Structure Prediction and Generative Design
15:25-15:50	Philipp Orekhov	Coarse-grained simulations of biomolecular systems
15:50-16:20	Alexander Sobolevsky	Structural view of TRP channel function and pharmacology
16:20-16:30	 Marine Bozdaganyan	About the Master Programme Nanobiotechnology, Shenzhen MSU-BIT University, Faculty of Biology
16:30-17:30	Scientific battle	
17:30-18:00	Closing Ceremony and Prizes	
18:00	Banquet for the School participants	